

What is claimed is;

1. A camera system comprising:

a focus lens group that executes a focal point adjustment by moving along an optical axis;

5 a drive unit that drives the focus lens group;

a focus lens group detection device that detects a position of the focus lens group along the optical axis;

a position storage operation unit operated to store in memory the position of the focus lens group as a preset position;

10 a lens group position storage unit at which at least the position of the focus lens group is stored when an instruction to store the preset position is issued by the position storage operation unit;

a position reset operation unit through which an instruction to reset the focus lens group to the preset position stored in memory in response to an operation of the position storage operation unit is issued; and

15 a defocus prevention unit that executes an operation to prevent defocusing when a failure in focusing on a subject is predicted to occur if the focus lens group is reset to the preset position stored in memory through the operation of the position storage operation unit.

25 2. A camera system according to claim 1, further comprising:

a zoom lens group that varies a focal length by moving along the optical axis; and

a zoom lens group detection device that detects information indicating a position of the zoom lens group along
5 the optical axis, wherein:

results of a detection executed by the zoom lens group detection device are also stored into the lens group position storage unit; and

the defocus prevention unit executes the operation to
10 prevent defocusing based upon the results of the detection executed by the zoom lens group detection device.

3. A camera system according to claim 2, further comprising:

a zoom lens group position comparison unit that compares
15 the position of the zoom lens group when the position reset operation unit is operated with the position of the zoom lens group having been stored in the lens group position storage unit in response to the operation of the position storage operation unit, wherein:

20 the defocus prevention unit executes the operation to prevent defocusing if the position of the zoom lens group when the position reset operation unit is operated is further toward a telephoto side compared to the position of the zoom lens group when the position storage operation unit was operated,
25 based upon results of a comparison executed by the zoom lens

group position comparison unit.

4. A camera system according to claim 2, further comprising:

a zoom lens group position comparison unit that compares
5 the position of the zoom lens group when the position reset
operation unit is operated with the position of the zoom lens
group having been stored in the lens group position storage
unit in response to the operation of the position storage
operation unit, wherein;

10 the defocus prevention unit executes the operation to
prevent defocusing if the position of the zoom lens group when
the position reset operation unit is operated is further toward
a telephoto side by a predetermined value or more compared
to the position of the zoom lens group when the position storage
15 operation unit was operated, based upon results of a comparison
executed by the zoom lens group position comparison unit.

5. A camera system according to claim 4, wherein:

the predetermined extent is set to a value at which a
20 focal point position of the focus lens group having been with
in a focus determination range used during an autofocus
operation, which is set within a focal depth range, does not
move out beyond the focal depth range when the zoom lens group
shifts toward the telephoto side by the predetermined extent.

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6. A camera system according to claim 1, wherein:
the defocus prevention unit executes the operation to prevent defocusing by issuing a warning for a photographer.
- 5 7. A camera system according to claim 1, wherein:
the defocus prevention unit executes the operation to prevent defocusing by disallowing a reset operation of the focus lens group.
- 10 8. A camera system according to claim 2, wherein:
the defocus prevention unit executes the operation to prevent defocusing by issuing a warning for a photographer if the position of the zoom lens group is not at a telephoto end when the position storage operation unit is operated.
- 15 9. A camera system according to claim 2, wherein:
the defocus prevention unit executes the operation to prevent defocusing by disallowing storage of a lens group position into the lens group position storage unit if the
20 position of the zoom lens group is not at a telephoto end when the position storage operation unit is operated.
10. A lens barrel comprising:
a focus lens group that executes a focal point adjustment
25 by moving along an optical axis;

a drive unit that drives the focus lens group;
a focus lens group detection device that detects a position of the focus lens group along the optical axis;
a position storage operation unit operated to store in
5 memory the position of the focus lens group as a preset position;
a lens group position storage unit at which at least the position of the focus lens groups is stored when an instruction to store the preset position is issued by the position storage operation unit;
10 a position reset operation unit through which an instruction to reset the focus lens group to the preset position stored in memory in response to an operation of the position storage operation unit is issued; and
a defocus prevention unit that executes an operation
15 to prevent defocusing when a failure in focusing on a subject is predicted to occur if the focus lens group is reset to the preset position stored in memory through the operation of the position storage operation unit.

20 11. A lens barrel according to claim 10, further comprising:
a zoom lens group that varies a focal length by moving along the optical axis; and
a zoom lens group detection device that detects information indicating a position of the zoom lens group along
25 the optical axis, wherein:

results of a detection executed by the zoom lens group detection device are also stored into the lens group position storage unit; and

the defocus prevention unit executes the operation to
5 prevent defocusing based upon the results of the detection executed by the zoom lens group detection device.

12. A lens barrel according to claim 11, further comprising:
a zoom lens group position comparison unit that compares
10 the position of the zoom lens group when the position reset operation unit is operated with the position of the zoom lens group having been stored in the lens group position storage unit in response to the operation of the position storage operation unit, wherein:

15 the defocus prevention unit executes the operation to prevent defocusing if the position of the zoom lens group when the position reset operation unit is operated is further toward a telephoto side compared to the position of the zoom lens group when the position storage operation unit was operated,
20 based upon results of a comparison executed by the zoom lens group position comparison unit.

13. A lens barrel according to claim 11, further comprising:
a zoom lens group position comparison unit that compares
25 the position of the zoom lens group when the position reset

operation unit is operated with the position of the zoom lens group having been stored in the lens group position storage unit in response to the operation of the position storage operation unit, wherein;

5 the defocus prevention unit executes the operation to prevent defocusing if the position of the zoom lens group when the position reset operation unit is operated is further toward a telephoto side by a predetermined value or more compared to the position of the zoom lens group when the position storage
10 operation unit was operated, based upon results of a comparison executed by the zoom lens group position comparison unit.

14. A lens barrel according to claim 13, wherein:

 the predetermined extent is set to a value at which a
15 focal point position of the focus lens group having been within a focus determination range used during an autofocus operation, which is set within a focal depth range, does not move out beyond the focal depth range when the zoom lens group shifts toward the telephoto side by the predetermined extent.

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15. A lens barrel according to claim 10, wherein:

 the defocus prevention unit executes the operation to prevent defocusing by issuing a warning for a photographer.

25 16. A lens barrel according to claim 10, wherein:

the defocus prevention unit executes the operation to prevent defocusing by disallowing a reset operation of the focus lens group.

5 17. A lens barrel according to claim 10, wherein:

the defocus prevention unit executes the operation to prevent defocusing by outputting a signal to be used to warn a photographer to a camera body.

10 18. A lens barrel according to claim 10, wherein:

the defocus prevention unit executes the operation to prevent defocusing by outputting a signal to be used to disallow a reset operation of the focus lens group to a camera body.

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19. A lens barrel according to claim 11, wherein:

the defocus prevention unit executes the operation to prevent defocusing by issuing a warning for a photographer, if the position of the zoom lens group is not at a telephoto
20 end when the position storage operation unit is operated.

20. A lens barrel according to claim 11, wherein:

the defocus prevention unit executes the operation to prevent defocusing by disallowing storage of a lens group
25 position into the lens group position storage unit, if the

position of the zoom lens group is not at a telephoto end when the position storage operation unit is operated.

21. A lens barrel according to claim 11, wherein:

5 the defocus prevention unit executes the operation to prevent defocusing by outputting a signal used to warn a photographer to the camera body if the position of the zoom lens group is not at a telephoto end when the position storage operation unit is operated.

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22. A lens barrel according to claim 11, wherein:

 the defocus prevention unit executes the operation to prevent defocusing by outputting a signal used to disallow storage of a lens group position into the lens group position
15 storage unit to a camera body, if the position of the zoom lens group is not at a telephoto end when the position storage operation unit is operated.